

Amendments to the Claims:10/510117
DT04 Rec'd PCT/PTO 04 OCT 2004

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus comprising:

shock detecting means of detecting a shock applied to data reading and writing means of performing data reading and/or writing on a predetermined recording medium, and/or the predetermined recording medium; and

shock history data creating means of creating shock history data concerning the detected shock based on a predetermined shock level criterion relating to a level of the shock.

2. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising:

a shock history data memory accumulating the created shock history data; and

shock history data information external output means of outputting information on the accumulated shock history data ~~to an outside~~ at predetermining timing.

3. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising control means of performing control relating to the data reading and/or writing based on a plurality of operation modes,

wherein the shock level criterion is a criterion relating to a shock level determined for each of the operation modes.

4. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 3, further comprising operation mode detecting means of detecting the operation mode,

wherein the shock history data creating means writes information on the detected operation mode into the shock history data.

5. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising reading/writing position detecting means of detecting a reading/writing position of the predetermined recording medium on which the data reading or writing is performed,

wherein the shock history data creating means writes information on the detected reading/writing position into the shock history data.

6. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising place time detecting means of detecting a place and/or time,

wherein the shock history data creating means writes information on the detected place and/or time into the shock history data.

7. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising shock level criterion changing means of changing the shock level criterion in accordance with an external instruction.

8. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, wherein the shock level criterion is a criterion relating to a level of the shock determined for each of a plurality of predetermined directions.

9. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 8, wherein the shock history data creating means writes information on the predetermined direction in which the shock is applied into the shock history data.

10. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 8, wherein the predetermined recording medium is a hard disk,

the data reading and writing means is a hard disk drive,

the criterion relating to the level of the shock is a threshold value corresponding to an upper limit of the level of the shock that the hard disk and the hard disk drive can endure, and

the threshold value determined with respect to a direction vertical to a surface of the hard disk is lower than the threshold value determined with respect to a direction parallel to the surface of the hard disk.

11. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising data reading and writing inhibiting means of inhibiting data reading and/or writing when the detected shock exceeds a predetermined limit.

12. (Currently Amended) A ~~recording-medium~~shock history data creating apparatus according to claim 1, further comprising:

a shock history data memory accumulating the created shock history data;

warning creating means of creating a warning relating to the detected shock based on the accumulated shock history data; and

warning external output means of outputting the created warning ~~to an outside~~ at predetermined timing.

13. (New) A shock history data creating method comprising:

a shock detecting step of detecting a shock applied to data reading and writing means of performing data reading and/or writing on a predetermined recording medium, and/or the predetermined recording medium; and

a shock history data creating step of creating shock history data concerning the detected shock based on a predetermined shock level criterion relating to a level of the shock.

14. (New) A program of causing a computer to execute the shock history data creating step, of the shock history data creating method according to claim 13, of creating shock history data concerning the detected shock based on a predetermined shock level criterion relating to a level of the shock.

15. (New) A computer-processable recording medium including the program according to claim 14.